US 70 Business Corridor Improvement Points of Emphasis

Project #1 - Resurfacing

- Limits: Wake County Line to US 70 / Clayton Bypass
- Scope includes resurfacing travel lanes and intersections; installation of long life pavement markings and markers
- Advertised for June let in May of 2016; re-advertising timeline depends upon consideration of Town support for Project #2
- Multi-million dollar project

<u>Project #2 – Median Safety Improvements</u>

- Limits: Shotwell Road to 2000' East of NC 42 (project study area)
- Scope includes median crossover intersection improvements & signal installation
- \$2.5-\$3 million dollar overall estimated cost
- Project will be considered for further funding upon support from the Town
- Comprehensive benefit-cost ratio up to 34; b/c 15 & higher typically receive funding
- Treatments proposed typically reduce crashes local to the intersection between 50% and 90% depending on treatment type
 - Overall 403 crashes occurred & reported in study area in previous 5 year period
 - 116 crashes occurred at the 6 intersections identified for improvement within proposed project limits
 - 182 total Injuries from 87 crashes; 31% of total injuries occurred at study intersections

Project #1 & #2 Combination Benefits

- Creates a comprehensive corridor improvement project not subject to STI prioritization
- Taxpayer cost savings between \$550,000 and \$850,000
- Reduced impact to traveling public associated with multiple construction project & schedules
- Eliminates redundant work along corridor should Project #2 follow Project #1

Case Study - Previously Implemented Projects within Corridor Findings & Results

- W-4703 Completed in 2008
- Project included directional crossovers at Smith Street & Durham Street; new signals installed at Moore Street & John Street
- Crash reduction rates:
 - Moore Street (new signal) 26.3%
 - Smith Street (directional crossover) 56.5%
 - o John Street (new signal) 31.8%
 - Durham Street (directional crossover) 79.5%
 - Overall Corridor segmental crash reduction between 18% and 80%